This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problems Mailbox.

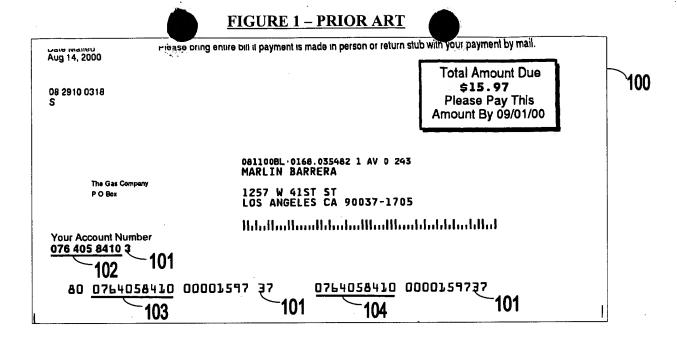


FIGURE 2 - PRIOR ART

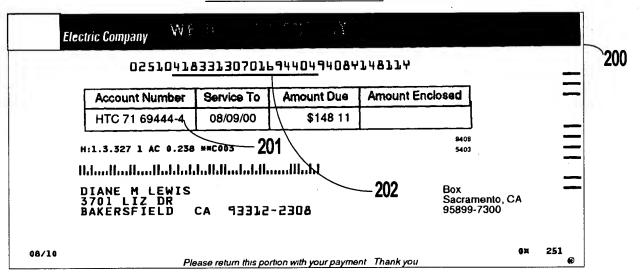
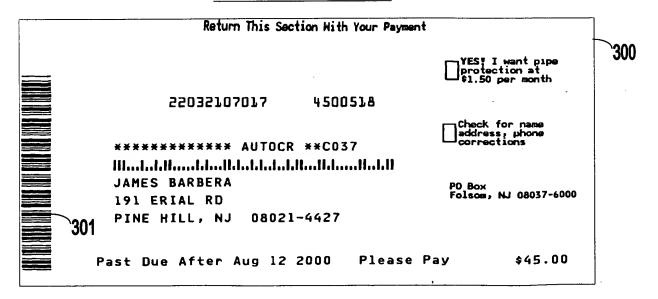
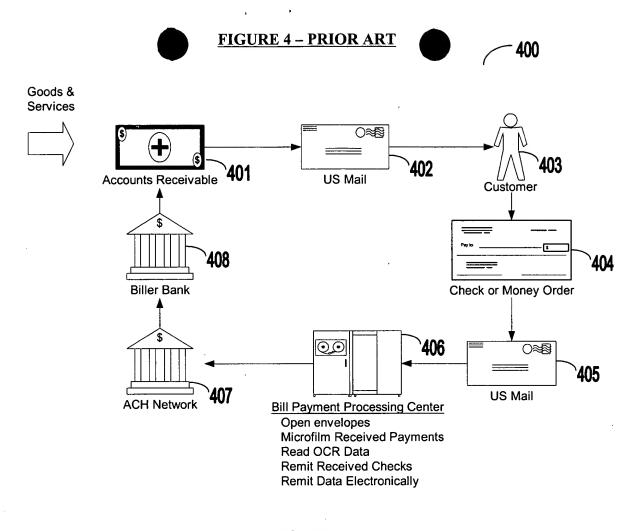
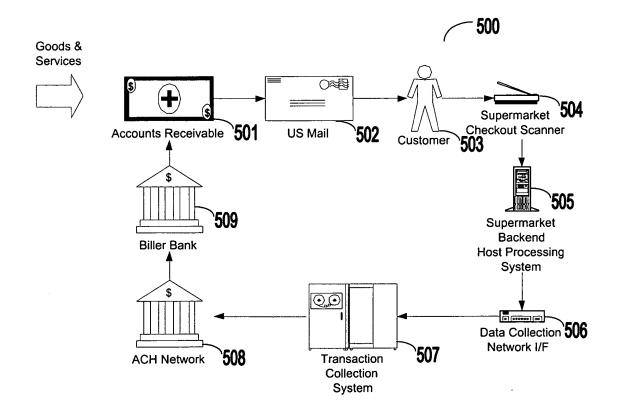


FIGURE 3 – PRIOR ART







基 1
1.3
44
ŊŢ.
\prod_{n}
•
<u> </u>
æ
H
N.
<u> </u>
1
n
==:

		000
L1	Bar Code Symbology with Embedded Check Symbol < 601	,
L2	(fd) (data) (c <u>d) <</u> 602
L3	(fd) (data) (data) (cd) < 603
L4	(fd) (data) (cd) (fd) (data) (data) (cd)<= 604
:		<u> </u>
Ln 🛀	605	

<u>I'I</u>	GUKE /
	700
Bar Code Symbology with Embedded Check	
data) (fd) (cd)
data) (data	
data) (fd) (cd) (data) (dat	

FIGURE 8

LEVEL 1 ENVELOPE 800

LEVEL 2 ENVELOPE

130001735076405841036 3

Digit Weight Digit*Weight Sum of Digits **Running Sum** 5

LEVEL 3 ENVELOPE

- 1000

Format Designator Value – 3	Example - 3 000173 5 0764058410 3 6	
1 Digit Format Designator Value = 3 <=	1001	
6 Digit Biller Identification Number	1002	
1 Check Digit of preceding 6 digits usin	ng 371371 weights, MOD10 algorithm (1003)	
Number of Components (1 Fixed Length	h (7), 1 Variable Length) (By Definition)	1004
Customer Account Number with embed	ded (and known algorithm) check digit (3) < 1005	
Calculated check digit of Level 3 data us	sing 2121 weights, Split MOD10 algorithm (6) < 1006	

FIGURE 11

LEVEL 3 ENVELOPE

1100

Format Designator Value - 4

1 Digit Format Designator Value = 4

6 Digit Biller Identification Number

1 Check Digit of preceding 6 digits using 371371 weights, MOD10 algorithm

Number of Components (1 Fixed Length (7), 1 Variable Length) (By Definition)

Customer Account Number with added check digit to be discarded before presentment to biller (3)

Calculated check digit of Level 3 data using 2121... weights, Split MOD10 algorithm (4)

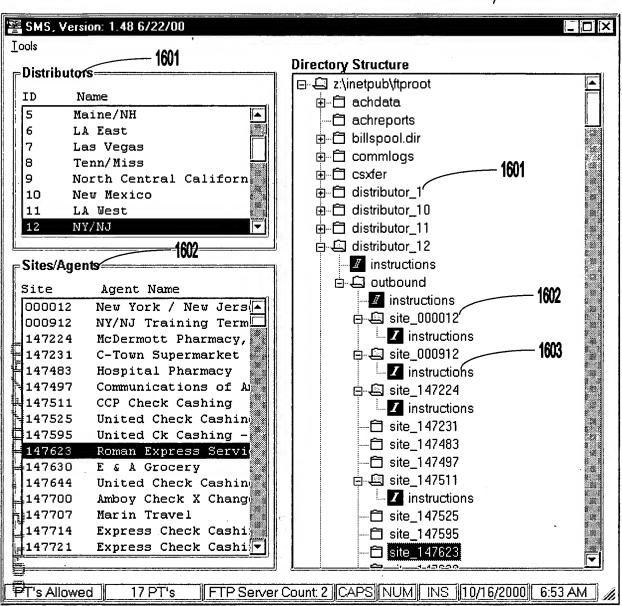
VALID ACCOUNT NUMBER

	Checkout Scanner	Retailer Host Processor	DCNI unit
1201 ⇒	Read Bar Code →	•	
1202 ⇒		Validate Bar Code →	
<u>1203</u> ⇒		← AC	K, return Biller Name/Account #
<u>1204</u> ;⇒	← Query Amount to be paid		
<u>1205</u> ;⇒	Amount →		
<u>1206</u> ⇒		Bar Code + Amount →	
<u>1207</u> ⇒			Store Transaction Data
<u>1208</u> ⇒		·	← ACK, return Transaction ID
1209 ⇒	← Print Biller Name, Accou	nt #, Transaction ID	
	•		
		FIGURE 13	
		INVALID ACCOUNT NUMBER	
	Checkout Scanner	Retailer Host Processor	DCNI unit
<u>1301</u> ⇒	Read Bar Code →		
<u>1302</u> ;⇒		Validate Bar Code →	
<u>1303</u> ⇒			← NAK, return reason code
<u>1304</u> ⇒	← Reject Payment		

1500

	TRE Statistics / Control Curr	ent System Batch: 10/12/2000 13)· 44·21
		PEC Performance Data	
	Counts	7 LOT OTTOMICATION DATA	TPEC State
	Jobs Pending 0 (0) 10	Jobs Active (dbclkmore) 0 (0) 10	Pause Paused Continue
	Jobs Attempted	Jobs Failed	
1501	0 (129) 1000 Transactions Processed	0 (0) 10	Hunt Mode Hunting
1502	0	(244) 1000	
	Timing ————————————————————————————————————	for last jobs (per job)	Monitor Activity Idle
Took sain the to	0 (00:06.9) 10	0 (0) 10	
	Last Job Run Time	Longest Pending	TP Biller
2	0 (00:01.0) 10	0 (00:00.0) 10	Resync
<u>.</u>	Longest Active	Estimated Completion	Tran Count from DB
	0 (00:00.0) 10	0 (0) 10	Reset Stats <u>D</u> one





				<u>FIGURE</u>	2.17		
		The CS is collecting jobs, waiting for the next rollover to occur.					Beports Qverride Ezit
End of Batch Manager, Version: 1.42d-branch 8/14/00	System Batch: Dct 17 2000 1:55:31 PM	Next Batch: Oct 18 2000 9:00:00 AM Time Left: 02:44:52	Manual Edit Counts Closed Closed Batch: 0 Batch: 0 edits to the next Batch	Consolidation Phase:	Reporting Trimming Phase:	Table:	Check Printing Checks left to print:

×]□ -	Fedit Configuration		Edit Electronic Trading Partner	UnGrey Create	Map Biller to	I rading / Memo Posting Partner			-	3 2000/10/114:47: 55 2000/10/1115:16: 6 2000/10/17 02-46:					Response <u>File</u> Reports	10/16/2000 6:35 AM
	1801	/ Holiday Skip							Time Added	2000/10/11 14:47:03 2000/10/11 15:16:25 2000/10/12 07:46:26	2000/10/12 14:19:04	2000/10/12 14:20:54	2000/10/12 14:28:17 2000/10/12 14:46:25		Gen. Report on Completion	CAPS INS
A CONTRACTOR CONTRACTO		on Count Total Amount	1,226.58 3,865.72 0.00	17,967.98 2,084.31 2,558.86		nic Batch		Search Back Days: 10	\vdash	1,673.23 Memo Pos 554.49 Memo Pos 1.055.45 Memo Pos			1		Report	NUM [
and the second s		atch Transaction Count	8 26 Power) 0	416 44 41		Create New Electronic Batch		Hide Completed Batches Se	Partner Name	USWest Memo USWest Memo	USWest CitiBank		ntic, NJ Memo		用时期	
		ners in selected system batch	ll Atlantic, NJ :iBank ? (Central Maine Power	MCRPS PNM USWest				Batches	BatchID	3 002210 Complete 3 002211 Complete 3 002212 Complete	002213	002215	002217 002218		97	
ev 8/15/00		Partners	13:04:00	11:46:12	13:39:37 13:07:15 12:45:51 13:35:09		Show Currently Disabled Partners As Well	atches	Starting SBN	2000/10/11 13:35:09 2000/10/11 13:35:09 2000/10/11 13:35:09	2000/10/11	2000/10/11	2000/10/11 2000/10/12		ereng	
ETI, Version: 2.30-dev 8/15/00	-Innut Data	System Batch Number		2000/10/02 11:4 2000/10/03 13:0 2000/10/04 13:3 2000/10/05 13:3	2000/10/06 13:3 2000/10/09 13:0 2000/10/10 12:4 2000/10/11 13:8 2000/10/12 13:4	Refresh	Show Currently Dis	-Current Electronic Batches	Ending SBN	2000/10/11 13:35:09 2000/10/11 13:35:09 2000/10/11 13:35:09				Selected: (none)	<u>D</u> elete	ldle

	10/11/2000 13:35:09	MCRPS Total: 17,967.	7.98				
			_				
BillerName	BatchNumber	CandTBatchID	CandTID Accour	Account Number	Amount	1	
Pacific Bell**Van Nuys	10/11/2000 14:27:13	14756020001011142713	1	3232355419925	28.92		
Gas Company	10/11/2000 14:28:57	14942920001011140848	38 041425	04142597006	62.74		
Gas Company	10/11/2000 14:30:57	15169020001011143057	_	39212229000	52.57		
Gas Company	10/11/2000 14:30:57	15169020001011143057	•	0472233278	22.09		
Pacific Bell**Van Nuys	10/11/2000 14:32:27	15133320001011141214	` ′	3232343487096	83.51		
Pacific Bell**Van Nuys	10/11/2000 14:32:27	15133320001011141214	• •	3232330153356	16.47		
Pacific Bell**√an Nuys	10/11/2000 14:32:27	15133320001011141214	(,,	3232345545400	43.11	8	
Pacific Bell**Van Nuys	10/11/2000 14:37:08	15116520001011143708	(.,	3237213017757	26.15		
Verizon**PD 30001	10/11/2000 14:37:08	15116520001011143708	24 012863	112863119714133204	16.51	2%	
Gas Company	10/11/2000 14:39:13	14942920001011143913	_	3792569355	19.69		
Gas Company	10/11/2000 14:39:13	14942920001011143913	_	1872356669	14.87		
Gas Company	10/11/2000 14:41:13	15241120001011130043	_	8460075338	25.92	68	
Pacific.Bell**Van Nuys	10/11/2000 14:41:13	15241120001011130043	(,,	3235664941063	23.30	Ī	
Pacific Bell**Van Nuys	10/11/2000 14:41:31	15279620001011144131	~	149721087141	134.83		
Pacific Bell**Van Nuys	10/11/2000 14:41:31	15279620001011144131	~	145422082046	78.45]	
Pacific Bell™Van Nuys	10/11/2000 14:41:31	15279620001011144131	28 714667	146670583861	34.92		
Pacific Bell**Van Nuys	10/11/2000 14:42:52	15133320001011141214	.,	3232354980440	59.21		
Gas Company	10/11/2000 14:48:05	15206120001011144805	29 049800	14980034310	5.83		
Pacific Bell™Van Nuys	10/11/2000 14:48:05	15206120001011144805	כיז	1232222330254	27.25		
Pacific Bell**Van Nuys	10/11/2000 14:48:05	15206120001011144805	m	232346559956	170.62		
Edison Company**Box 600	10/11/2000 14:50:57	15241120001011145057	40 145310983	0983	17.98		
Gas Company	10/11/2000 14:50:57	15241120001011144113	_	5810083004	9.45		
Gas Company	10/11/2000 14:50:57	15241120001011145057	_	6150075766	51.70		
Gas Company	10/11/2000 14:50:57	15241120001011145057	37 111001	1100103701	47.93	***	
Gas Company	10/11/2000 14:50:57	15241120001011145057	41 023500	2350083008	15.25		
LA Municipal Services**Box 10324	10/11/2000 14:50:57	15241120001011145057	39 108976	089762100760009002501	137.22		
Pacific Bell**Van Nuys	10/11/2000 14:50:57	15241120001011144113	(,,	3235835923416	30.67		i
Pacific Bell**(/an Nuns	10/11/2000 14:50:57	15241120001011145057	ì	3227525AE342E	29.25	Ū	

 artner Electronic Partner		ostings			(Teactivate)		í	COLUMBIA		6000			Flectronic			Manual			Manage Conject	- Mainor Osung Fruin.		Change							Egit Biller	ACH Details	
Memo Posting Partner		USWest Memo Postings																			ů.										
Electronic Trading Partner	MCRPS	USWest	CitiBank (inactive)	CitiBank	MCRPS	CitiBank (inactive)	CMP (Central Maine Pow	CitiBank (inactive)	CitiBank	MCRPS	MCRPS	CitiBank	Bell Atlantic, NJ	CitiBank	CitiBank	CitiBank	CitiBank	CitiBank	CitiBank	CitiBank	CitiBank	PNM	CitiBank	MCRPS	CitiBank	CitiBank	MCRPS	CitiBank	CitiBank_finactive)		
Cash Payment Method	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic Electronic		*
BillerName	Verizon**PD 30001	US West Communications**Phoenix	Salt River Project	Discover Private Issue**Box 7051	Pacific Bell**Van Nuys	APS	Central Maine Power	American Express**8x 2853, NY,NY	Con Edison**PO 1702	Gas Company	Edison Company**Box 600	Northern Utilities, Inc** PO 4320	Verizon**P0 4830	PSE&G**NJ	Discover Card**1730 South	Texaco**Tampa	Cablevision of NYC**Soundview Av	AT&T Universal Card Services**Columbus	PG&E**Embarcadero Drive	Sprint **P0 52243	Cablevision of Long Island	PNM Electric & Gas Services	Sprint **P0 650270	LA Municipal Services**Box 10324	Bell Atlantic**28007	Sprint **PO 52243	Pacific Bell **Sacramento	Discover Card** Box 105430	American Express**Los Angeles		- ×
BillerID	11100	00112	00130	00134	00140	00145	00148	00160	1900	00173	00180	00187	00190	00191	00138	00201	00203	00228	00256	00261	00266	00268	00279	00285	00230	00304	00316	00348	00362	•	

Image Size Payment Conv. Rate Change Conv. Rate Show Check Image <u>D</u>elete Close Close Reset Zoom 뎚 Payment Amount Change Amount 9988 ^aayment Type Change Type Bill Type Gas02 21.16 8.84 Show Biller Payment Info System Batch Number Show <u>Authorization</u> 2000101213:08:54 2000101213:44:31 era Cabilornia Gas Compton (1-10-16) Payment Record **Batch Number** Payment Info Payment 10 CandT ID PT Name mage ID 150969 00000 Voided Total Amount Due \$20.16 Please bring erbre call if gayners is made in person or return stud with your payment by mail 6816 CORONA AVE ABEL TA 8EL CA 90201-3465 Hillemidillimmillabilimbilimbil 1333002608 0000064025 To Manual 10/11/2000 19:07:15 Close Cash to Biller Print Bill Altered Oper **ACH Timestamp** Agent Fee \$**6.40** Please Pay This Amount By 10/31/00 Code 20.16 1009003L.0243 066840 1 AV 0.243 QNABEL SALAZAR Current Amount (Biller Name) Gas Company Zip Show Bill Image Biller: DE Fee **Problem Code** 801333002608000020162613330026080000064025 **Bill Payment** Operator ID 10/12/2000 16:37:23 Bill Type Payment Complete NoScan Gas02 20.16 DFLT Previous Balance \$13.76 Due Now 80 3333002608 00002016 26 Ħ Exception Edit Check and Trail Record (Table Transaction Fee DE Fee System Batch Number 5096920001012130854 0.65 10/12/2000 16:37:04 Original OCR Line ransaction Start 2000101213:08:54 2000101213:44:31 Упи Аплил Минђег 133 300 2608 2 This Gas Campary P. D. Bas C. Martin Pa. Co. 97796 CandT Batch ID **Batch Number** 3330026082 Manual Edit OCR Line CandT ID mage ID Bill Image 10 2046 0795 PT Name Cate Marked Out to, 2000 163718 00029 8 Ē -CandT Record Types Search Manual C&T ID: Find C&Ts, Payments, Images Exception C&T Show Edit Initials Show Site Info Payment ID: Print Counts 00027 00028 00030 00030 00026 <u>S</u>0L C&T Browser, v3.32 06/27/2000 1 0 0 0 3 4 00 P 20000907 15:06:29
20000910 13:07:09
20000910 13:07:09
20000911 15:05:56
20000911 15:05:56
20000913 15:22:10
20000913 15:22:10
20000915 14:43:25
20000915 14:43:25
20000915 14:43:25
20000917 11:13:02
20000920 14:41:58
20000920 14:41:58
20000920 14:41:58
20000920 13:12:44
20000920 13:12:44
20000920 13:17:45
20000920 13:17:45
20000920 13:17:45
20001000 13:33:57
20001000 13:33:57
20001001 13:35:09
20001011 13:35:09 2000101213:08:54 System Batch: Global Selections T Name: 49429 50969 151165 151207 151277 Batch: 48491